

## NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

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## POLITICS OF AVIATION FIELDS.

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The financial obstacle first afises. There may also be doubts concerning the practical application of a method of transportation, hitherto considered dangerous and exceptional. For the government, there is the wish to remain at the head of an industry born in France, the desire to extend and develop it, the certainty of further progress and, lastly, the relative smallness of the necessary outlay, as compared with the military abyss.

Parliament, in voting the larger part of the requested appropriations (with reservations, it is true, regarding the extent of the program submitted to it) has pronounced for the affirmative. Moreover, the fact of having, in January, 1920, taken the air service away from the war department and attached it to a civil department, the department of public works, is of itself significant. From that day, the airplane ceased to be simply an engine of death, to become, perhaps, the most active agent of peace. The government has therefore decided to have a commercial air service.

Now, the problem of commercial aviation involves that of the aviation fields. This problem is solved neither by the number nor by the location of the military airdromes. It is, in fact, evident that the choice of the military aviation ffields was governed by other considerations than those which must control the development of commercial aviation. Military airdromes are being utilized wherever possible, but they do not solve the problem, which still presents itself under three main aspects:

- a) Number;
- b) Area;
- c) Urgency.

The progress of aviation has certainly been rapid, but it must be confessed that it has all been in the same direction. I understand perfectly that a modern airplane is ten times better than the biplane of the Wright Brothers, but when all is said, it is only an improvement. The principle has not changed. Who can say in how many years an airplane, thanks to the helicopter, will "alight" instead of "landing"? No one.

However, if we wish to have commercial aviation, we must reason concerning what is and not concerning what will be. Existing airplanes require wide fields for landing. They have engines which break down (rarely, it is true, but suddenly), thereby compelling the pilot to descend wherever he happens to find himself. Hence the safety and prosperity of commercial aviation depends on the landing fields, their location and number. The more judiciously they are distributed, the fewer accidents there will be.

After admitting this point, it is hardly necessary to mention that they must be large enough. In matters of transportation, the element of safety is of prime importance. Even if one is accustomed to place little value on human life, it nevertheless represents a capital which is well worth, on the part of the government, the cost of the few hectares necessary to safeguard it.

The third aspect, under which the question of aviation fields must be considered, is that of the order of importance of estab-

lishing the lines. After a system of airways has been planned and all the grand international routes laid out on the map, the government alone must indicate the ones to be first opened to traffic.

In fact, air traffic companies cannot yet exist without the aid of the government, which must distribute its subsidies in the interest of the nation. It follows that the organization of the airdromes is more urgent on the first lines to be opened than on the others.

This brings us to the question of prices. Discrete and rapid action would secure for the government the necessary pieces of land under the ordinary conditions of sales between individuals, but, in practice, secrecy is never observed. A field cannot be chosen without going over it in all directions and taking its measurements. In order to make out the documents, the project must be revealed to the local authorities. It is without exception that at the end of a few days the plan has been divulged and the price immediately becomes exorbitant. If it is desired to see the price lowered, the government has but one recourse, to wait. Expropriation should not be resorted to at first. It is a "sword of Damocles" which must be kept suspended a long time over the head of the recalcitrant. It is a constant menace that weakens opposition. It is a general truth which obtains in business as elsewhere.

From this exposition, the consequences are easily seen. The possession of an airdrome, for reasons of safety or exploitation,

is needed without delay. It can be obtained only at an exorbitant price. On the other hand, if one can wait, a considerable saving can be made. Once more the decision, in kind, rests with the government.

We have already mentioned that the utilization of military airdromes has been carefully considered. It is hardly necessary to add that, provided they answer the technical requirements, uncultivated or unproductive fields are preferred by the government.

When, however, for technical reasons (necessary nearness to highways, railroads, canals, the labor market, level and open territory, etc.), suitable fields can be found only in productive plains, they must be taken there. Then there inevitably arise the complaints of the farmers, often backed by people of high authority.

To speak frankly, such complaints are generally the poorest founded of all the objections that can be made to the choice of a field. They move one the more easily, because they are always made in a tone of great sincerity. Without wishing to speak ill of our peasants, whom I know well and love much, it may be said that they are past masters in the art of whining and even the more difficult art of exciting pity. Though there may be genuine complaints, they are exceptional. In fact, one of two things takes place. Either the expropriated domain is in parcels and each farmer loses only a small patch, or else it is occupied by a single tenant, in which case the dispossessed proprietor is sufficiently indemnified by the amount paid, which is always ample.

Moreover, this is taking but a narrow view of the question.

The following figures demonstrate, more eloquently than any other arguments, the real way to view it.

In September, 1920, the statistics of the department of agriculture showed about 22,000,000 hectares under cultivation.

The total area, the acquisition of which was contemplated at that date for commercial aviation was about 1100 hectares. This included fields which were almost unproductive, but that matters little. The simple announcement of these figures shows that the country would not lose more than 1/20000 of its cultivated surface for the needs of aviation. Only an excessive pessimism could see in this proportion the menace of a famine.

In short, the "politics of aviation fields" lies in a few propositions: The need of having as large a number of fields as possible and of sufficient area; the utilization of the larger part of the existing military fields; the selection of uncultivated or unproductive fields, whenever technical conditions permit; ability to disregard (save in exceptional cases) objections of an agricultural nature; it being understood, moreover, that under whatever aspect the problem is presented, the decision always rests with the government.

Translated by the National Advisory Committee for Aeronautics.



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